OMRF 114 CIP2.ST25 SEQUENCE LISTING

```
<110>
       Harley, John
       Methods and Reagents for Diagnosis of Autoantibodies
<120>
       OMRF 114 CIP (2)
<130>
       07/867,819
<140>
<141>
       1992-04-13
<150>
       07/472,947
<151>
       1990-01-31
<150>
       07/648,205
       1991-01-31
<151>
<160>
       161
       PatentIn version 3.1
<170>
<210>
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
       (1)..(8)
<222>
<223>
       Binding site
<400>
       1
Gly Thr Phe Lys Ala Phe Asp Lys
<210>
       2
<211>
       15
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(8)
<223>
       Binding site
```

Page 1

```
2
<400>
Cys Asp Glu Phe Arg Lys Ile Lys Pro Lys Asn Ala Lys Gln Pro
                                      10
                                                           15
<210>
       3
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(8)
<223>
       Binding site
<400> 3
Arg Val Pro Leu Ala Gly Ala Ala
<210>
       4
<211>
       17
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (4)..(11)
<223>
       Binding site
<400>
Ala Gly Gly Pro Gly Val Gly Arg Ala Ala Gly Arg Gly Val Pro Ala
                                      10
                                                           15
Gly
<210>
       5
<211>
       15
<212>
       PRT
```

Page 2

60

```
<213>
      homo sapien
<220>
       MISC_FEATURE
<221>
<222>
      (7)..(14)
      Binding site
<223>
<400>
      5
Ala Gly Leu Ala Gly Pro Val Arg Gly Val Gly Gly Pro Ser Gln
                                                          15
<210>
       6
<211>
       12
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (3)..(10)
<223>
       Binding site
<400>
Gln Val Met Thr Pro Gln Gly Arg Gly Thr Val Ala
<210>
       7
<211>
       15
<212>
       PRT
<213>
       homo sapien
<220>
<221>
      MISC_FEATURE
<222>
      (8)..(15)
      Binding site
<223>
<400>
      7
Pro Thr Gln Tyr Pro Pro Gly Arg Gly Thr Pro Pro Pro Val
1
                5
                                     10
                                                          15
```

Page 3

61

K

```
<210>
       8
<211>
       15
<212>
       PRT
<213>
       homo sapien
<220>
       MISC FEATURE
<221>
<222>
       (2)..(9)
<223>
       Binding site
<400>
Thr Pro Pro Pro Pro Val Gly Arg Ala Thr Pro Pro Pro Gly Ile
                                      10
<210>
       9
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
       (1)..(8)
<222>
<223>
       Binding site
<400>
Pro Pro Pro Gly Ile Met Ala Pro
                 5
<210>
       10
<211>
       11
<212>
       PRT
<213>
       homo sapien
<220>
       MISC FEATURE
<221>
<222>
       (3)..(10)
<223>
       Binding site
<400>
       10
Met Ala Pro Pro Pro Gly Met Arg Pro Pro Met
                                  Page 4
```

65

5 1 10 <210> 11 <211> 16 <212> PRT <213> homo sapien <220> <221> MISC FEATURE (5)..(12) <222> <223> Binding site <400> 11 Pro Ile Gly Leu Pro Pro Ala Arg Gly Thr Pro Ile Gly Met Pro Pro <210> 12 <211> 8 <212> PRT <213> homo sapien <220> MISC_FEATURE <221> <222> (1)..(8) <223> Binding site <400> 12 Pro Ile Gly Met Pro Pro Pro Gly 1 5 <210> 13 <211> 11 <212> PRT <213> homo sapien <220> <221> MISC FEATURE (1)..(8)<222> <223> Binding site

Page 5

63

*

```
<400>
       13
Arg Pro Pro Pro Gly Ile Arg Gly Pro Pro
<210>
      14
<211>
       12
<212>
      PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222> (3)..(10)
      Binding site
<223>
<220>
<221>
      VARIANT
<222>
       (9)..(9)
       Can be R, F, G, H, I, K, S, T, V or Y
<223>
<400> 14
Arg Gly Pro Pro Pro Pro Gly Met Xaa Pro Pro Arg
<210>
      15
<211>
       9
<212>
      PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222>
      (1)..(8)
<223>
      Binding site
<400>
      15
Thr Phe Lys Ala Phe Asp Lys His Met
<210> 16
<211>
       8
```

Page 6

```
<212>
       PRT
       homo sapien
<213>
<220>
<221>
       MISC FEATURE
       (1)..(8)
<222>
<223>
      Binding site
<400>
       16
Glu Gly Pro Pro Pro Lys Asp Thr
<210>
       17
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(8)
<223>
       Binding site
<400>
      17
Lys Asp Thr Gly Ile Ala Arg Val
                 5
<210>
       18
<211>
       10
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (3)..(10)
<223>
       Binding site
<400>
       18
Ile Pro Gln Ala Pro Ala Gly Leu Ala Gly
```

Page 7

65

```
<210>
       19
<211>
       18
<212>
       PRT
       homo sapien
<213>
<220>
<221>
       MISC_FEATURE
<222>
       (4)..(16)
<223>
       Binding site
<400>
      19
Gln Val Leu Asn Ile Gln Met Arg Arg Thr Leu His Lys Ala Phe Lys
Gly Ser
<210>
       20
<211>
       21
<212>
       PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222>
       (8)..(15)
<223>
       Binding site
<400>
Ile Cys His Gln Ile Glu Tyr Tyr Phe Gly Asp Phe Asn Leu Pro Arg
                                      10
                                                           15
Asp Lys Phe Leu Lys
            20
<210>
       21
<211>
       12
<212>
       PRT
<213>
      homo sapien
```

Page 8

66

```
<220>
<221>
       MISC FEATURE
       (2)..(9)
<222>
<223>
       Binding site
<400>
       21
Trp Val Pro Leu Glu Ile Met Ile Lys Phe Asn Arg
                 5
<210>
       22
       12
<211>
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (3)..(10)
<223>
       Binding site
<400>
       22
Lys Thr Lys Ile Arg Arg Ser Pro Ser Lys Pro Leu
<210>
       23
<211>
       15
       PRT
<212>
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(8)
<223>
       Binding site
<400>
       23
Asn Arg Leu Asn Arg Leu Thr Thr Asp Phe Asn Val Ile Val Glu
                                      10
<210>
       24
<211>
       13
```

Page 9

67

```
<212>
       PRT
<213>
       homo sapien
<220>
       MISC FEATURE
<221>
<222>
       (4)..(13)
<223>
      Binding site
<400> 24
Gly Glu Ile Lys Trp Ile Asp Phe Val Arg Gly Ala Lys
                                     10
<210>
       25
<211>
       20
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (6)..(13)
<223>
      Binding site
<400>
       25
Ser Leu Asn Lys Trp Lys Ser Lys Gly Arg Arg Phe Lys Gly Lys Gly
1
                5
                                     10
                                                          15
Lys Gly Asn Lys
<210>
       26
<211>
       12
<212>
       PRT
<213>
       homo sapien
<220>
      MISC_FEATURE
<221>
<222>
       (5)..(12)
<223>
      Binding site
<400>
      26
```

Page 10

68

```
Gly Asn Leu Gln Leu Arg Asn Lys Glu Val Thr Trp
<210>
       27
<211>
       9
<212>
       PRT
<213>
       homo sapien
<220>
<221>
      MISC_FEATURE
<222>
      (2)..(9)
<223>
      Binding site
<400>
      27
Ile Phe Val Val Phe Asp Ser Ile Glu
<210>
       28
<211>
       15
<212>
      PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222>
      (7)..(14)
<223>
      Binding site
<400>
       28
Lys Glu Thr Asp Leu Leu Ile Leu Phe Lys Asp Asp Tyr Phe Ala
<210>
       29
<211>
       17
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
<222>
       (9)..(16)
<223>
      Binding site
```

Page 11

69

<400> 29 Tyr Lys Asn Asp Val Lys Asn Arg Ser Val Tyr Ile Lys Gly Phe Pro Thr <210> 30 <211> 9 <212> PRT <213> homo sapien <220> <221> MISC FEATURE <222> (1)..(8) <223> Binding site <400> 30 Thr Asp Phe Asn Val Ile Val Glu Ala <210> 31 <211> 11 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE <222> (1)..(8)<223> Binding site <400> 31 Glu Gly Ile Ile Leu Phe Lys Glu Lys Ala Lys <210> 32 <211> 14

Page 12

70

```
PRT
<212>
       homo sapien
<213>
<220>
<221>
       MISC_FEATURE
<222>
      (7)..(14)
<223>
      Binding site
<400>
       32
Lys Val Gln Phe Gln Gly Lys Lys Thr Lys Phe Ala Ser Asp
<210>
       33
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(8)
<223>
       Binding site
<400>
       33
Arg Glu Asp Leu His Ile Leu Phe
                 5
<210>
       34
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
<222>
       (1)..(8)
<223>
       Binding site
<400>
       34
Cys Leu Leu Lys Phe Ser Gly Asp
```

Page 13

```
<210>
       35
<211>
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
      (1)..(8)
<223>
       Binding site
<400> 35
Thr Gly Pro Val Lys Arg Ala Arg
<210>
       36
<211>
       10
<212>
       PRT
<213>
       homo sapien
<220>
<221>
      MISC_FEATURE
<222>
      (3)..(10)
<223>
      Binding site
<400>
       36
Lys Val Glu Ala Lys Leu Arg Ala Lys Gln
                5
                                      10
<210>
       37
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(8)
       Binding site
<223>
<400> 37
```

Page 14

```
Met Asn Arg Leu His Arg Phe Leu
                5
       38
<210>
<211>
       9
<212>
      PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222>
      (2)..(9)
<223>
      Binding site
<400>
      38
Leu Cys Phe Gly Ser Glu Gly Gly Thr
<210>
       39
<211>
      11
<212>
       PRT
<213>
      homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (1)..(8)
<223>
      Binding site
<400>
       39
Ser Glu Gly Gly Thr Tyr Tyr Ile Lys Glu Gln
                                     10
<210>
       40
<211>
       11
<212>
       PRT
<213>
       homo sapien
<220>
      MISC_FEATURE
<221>
<222>
      (3)..(10)
<223>
      Binding site
```

Page 15

<400> 40 Glu Ile Lys Ser Phe Ser Gln Glu Gly Arg Thr <210> 41 <211> 9 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE <222> (2)..(9) <223> Binding site <400> 41 Ser Gln Glu Gly Arg Thr Thr Lys Gln <210> 42 <211> 9 <212> PRT <213> homo sapien <220> MISC_FEATURE <221> <222> (1)..(8) <223> Binding site <400> 42 Gly Arg Thr Thr Lys Gln Glu Pro Met <210> 43 <211> 12 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE

Page 16

```
OMRF 114 CIP2.ST25
<222>
      (4)..(11)
<223>
      Binding site
<400>
       43
Ile Ser Thr Lys Gln Ala Ala Phe Lys Ala Val Ser
<210>
       44
<211>
       9
       PRT
<212>
      homo sapien
<213>
<220>
       MISC_FEATURE
<221>
<222>
      (1)..(8)
<223>
      Binding site
<400>
      44
Ala Phe Lys Ala Val Ser Glu Val Cys
                5
<210>
       45
<211>
       15
<212>
      PRT
<213>
      homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (5)..(12)
<223>
       Binding site
<400>
       45
Phe Thr Phe Ile Gln Phe Lys Lys Asp Leu Lys Glu Ser Met Lys
                                     10
<210>
       46
<211>
       10
<212>
       PRT
```

Page 17

<213>

homo sapien

```
<220>
<221>
       MISC_FEATURE
<222>
       (2)..(10)
       Binding site
<223>
<400>
      46
Ser Met Lys Cys Gly Met Trp Gly Arg Ala
<210>
      47
<211>
       12
<212>
      PRT
<213>
      homo sapien
<400>
      47
Gly Met Trp Gly Arg Ala Leu Arg Lys Ala Ile Ala
                5
                                     10
<210>
       48
<211>
       23
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
      (9)..(16)
<223>
      Binding site
<400> 48
Ala Leu Ala Val Thr Lys Tyr Lys Gln Arg Asn Gly Trp Ser His Lys
                                     10
Asp Leu Leu Arg Leu Ser His
            20
<210>
       49
<211>
       11
<212>
      PRT
```

Page 18

76

```
<213> homo sapien
<220>
     MISC_FEATURE
<221>
<222>
      (3)..(10)
<223>
     Binding site
<400> 49
Leu Leu Arg Leu Ser His Leu Lys Pro Ser Ser
                5
                                    10
<210> 50
<211> 8
<212> PRT
<213> homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (1)..(8)
<223> Binding site
<400> 50
His Glu Leu Tyr Lys Glu Lys Ala
<210>
      51
<211>
<212>
      PRT
<213>
      homo sapien
<220>
     MISC_FEATURE
<221>
<222>
      (1)..(8)
<223> Binding site
<400> 51
Leu Tyr Lys Glu Lys Ala Leu Ser Val
                5
```

Page 19

```
<210>
       52
<211>
       14
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
<222>
       (7)..(14)
<223>
       Binding site
<400>
      52
Lys Ala Leu Ser Val Glu Thr Glu Lys Leu Leu Lys Tyr Leu
                                      10
<210>
       53
<211>
       8
<212>
       PRT
<213>
       homo sapien
<220>
<221>
      MISC_FEATURE
<222>
       (1)..(8)
<223>
       Binding site
<400>
       53
Lys Leu Leu Lys Tyr Leu Glu Ala
<210>
       54
<211>
       13
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
<222>
       (6)..(13)
<223>
       Binding site
<400>
       54
```

Leu Glu Ala Val Glu Lys Val Lys Arg Thr Lys Asp Glu Page 20

78

```
OMRF 114 CIP2.ST25
```

5 1 10 <210> 55 <211> 22 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE <222> (1)..(14)<223> Binding site <400> 55 His Leu Leu Thr Asn His Leu Lys Ser Lys Glu Val Trp Lys Ala Leu _. 5 10 Leu Gln Glu Met Pro Leu 20 <210> 56 <211> 11 <212> PRT <213> homo sapien <220> MISC_FEATURE <221> (1)..(8) <222> <223> Bindind site <400> 56 Ala Leu Leu Arg Asn Leu Gly Lys Met Thr Ala <210> 57 <211> 8 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE

Page 21

<222> (1)..(8) <223> Binding site

<400> 57

Leu Gly Lys Met Thr Ala Asn Ser 1 5

<210> 58 <211> 17 <212> PRT <213> homo sapien

<220>

<221> MISC_FEATURE <222> (6)..(15) <223> Binding site

<400> 58

Leu Cys Asn Glu Lys Leu Leu Lys Lys Ala Arg Ile His Pro Phe His 1 5 10 15

Ile

<210> 59
<211> 18
<212> PRT
<213> homo sapien

<220>
<221> MISC_FEATURE
<222> (2)..(9)
<223> Binding site

<400> 59

Thr Tyr Lys Thr Gly His Gly Leu Arg Gly Lys Leu Lys Trp Arg Pro 1 5 10 15

Page 22

80

Asp Glu

<212>

<213>

<220>

PRT

homo sapien

```
60
<210>
<211>
       PRT
<212>
<213>
       homo sapien
<220>
<221>
      MISC_FEATURE
<222>
       (1)..(8)
<223>
       Binding site
<400>
       60
Ala Leu Asp Ala Ala Phe Tyr Lys
<210>
       61
<211>
       20
<212>
       PRT
<213>
       homo sapien
<220>
<221>
      MISC FEATURE
       (1)..(8)
<222>
<223>
      Binding site
<400> 61
Ala Ala Phe Tyr Lys Thr Phe Lys Thr Val Glu Pro Thr Gly Lys Arg
                                      10
                                                           15
Phe Leu Leu Ala
            20
<210>
       62
<211>
       10
```

Page 23

81

```
<221> MISC_FEATURE
<222>
      (1)..(8)
<223> Binding site
<400> 62
Ala Ser Met Asn Gln Arg Val Leu Gly Ser
                                    10
<210>
       63
<211>
       8
<212>
      PRT
<213>
      homo sapien
<220>
<221> MISC_FEATURE
<222>
      (1)..(8)
<223> Binding site
<400> 63
Ala Met Cys Met Val Val Thr Arg
                5
<210>
      64
<211>
<212>
       PRT
<213>
       homo sapien
<220>
<221> MISC_FEATURE
<222>
      (1)..(8)
<223> Binding site
<400>
     64
Ala Phe Ser Asp Glu Met Val Pro
                5
```

<210> 65 <211> 8 <212> PRT

Page 24

82

```
<213> homo sapien
<220>
     MISC_FEATURE
<221>
<222> (1)..(8)
<223> Binding site
<400> 65
Val Pro Cys Pro Val Thr Thr Asp
                5
<210> 66
<211> 8
<212> PRT
<213> homo sapien
<220>
<221>
      MISC FEATURE
<222>
     (1)..(8)
<223>
     Binding site
<400> 66
Val Leu Met Ala Met Ser Gln Ile
<210> 67
<211>
      8
<212>
      PRT
<213>
      homo sapien
<220>
<221>
     MISC_FEATURE
<222>
      (1)..(8)
<223> Binding site
<400> 67
Thr Asp Cys Ser Leu Pro Met Ile
               5
```

Page 25

```
<210>
       68
<211>
       15
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC FEATURE
<222>
       (3)..(10)
<223>
       Binding site
<400>
       68
Cys Ser Leu Pro Met Ile Trp Ala Gln Lys Thr Asn Thr Pro Ala
                 5
                                       10
<210>
       69
<211>
       10
<212>
       PRT
<213>
       homo sapien
<220>
       MISC_FEATURE
<221>
<222>
       (1)..(8)
<223>
       Binding site
<400>
       69
Thr Phe Ala Gly Gly Val His Pro Ala Ile
                                       10
<210>
       70
<211>
       16
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (4)..(11)
<223>
       Binding site
<400>
       70
```

Ile Ala Leu Arg Glu Tyr Arg Lys Lys Met Asp Ile Pro Ala Lys Leu Page 26

84

K

1	5	OMR!	10	15
<210><211><211><212><213>	71 16 PRT homo sapien	·		
<400>	71			
Ile Va 1	l Thr Lys Tyr 5	Ile Thr Ly	ys Gly Trp Lys Gl 10	lu Val His Glu Leu 15
<210><211><211><212><213>	72 8 PRT homo sapien			
<220><221><222><223>	MISC_FEATURE (1)(8) Binding site			
<400>	72			
Ala Le 1	u Phe Ala Pro 5	Arg Asp Pr	ro	
<210><211><211><212><213>	73 10 PRT homo sapien			
<222>	MISC_FEATURE (1)(8) Binding site			
<400>	73			
Glu Ar	g Met Glu Arg 5	Lys Arg Ar	rg Glu Lys 10	

Page 27

*

10

```
<210>
       74
<211>
       14
<212>
       PRT
<213>
       homo sapien
<220>
       MISC FEATURE
<221>
       (2)..(9)
<222>
<223>
       Binding site
<400>
       74
His Met Val Tyr Ser Lys Arg Ser Gly Lys Pro Arg Gly Tyr
```

<210> 75

<211> 15

<212> PRT

<213> homo sapien

<220>

<221> MISC_FEATURE

<222> (6)..(13)

<223> Binding site

<400> 75

Tyr Lys His Ala Asp Gly Lys Lys Ile Asp Gly Arg Arg Val Leu 15

<210> 76

<211> 8

<212> PRT

<213> homo sapien

<220>

MISC_FEATURE <221>

<222> (1)..(8)

<223> Binding site

76 <400>

Val Glu Arg Gly Arg Thr Val Lys

Page 28

1 5 <210> 77 <211> <212> PRT <213> homo sapien <220> MISC FEATURE <221> <222> (1)..(8) <223> Binding site <400> 77 Val Lys Gly Trp Arg Pro Arg Arg <210> 78 <211> 8 <212> PRT <213> homo sapien <220> <221> MISC_FEATURE <222> (1)..(8) Binding site <223> <400> 78 Arg Arg Ser Arg Ser Arg Asp Lys 5 <210> 79 <211> <212> PRT <213> homo sapien <220> <221> MISC FEATURE <222> (1)..(8) <223> Binding site

Page 29

87

OMRF 114 CIP2.ST25 <400> 79 Arg Arg Arg Ser Arg Glu Arg Ser <210> 80 <211> PRT<212> <213> homo sapien <220> MISC_FEATURE <221> <222> (1)..(8) <223> Binding site <400> 80 Ser Arg Glu Arg Ser Lys Asp Lys <210> 81 <211> 15 <212> PRT<213> homo sapien <220> <221> MISC_FEATURE <222> (8)..(15) <223> Binding site <400> 81 Lys Asp Lys Asp Arg Asp Arg Lys Arg Arg Ser Ser Arg Ser Arg 5 10 15 <210> 82 <211> <212> PRT <213> homo sapien

Page 30

<220>

<221> <222>

MISC FEATURE

(1)..(8)

88

```
<223> Binding site
<400>
     82
Arg Arg Ser His Arg Ser Glu Arg
                5
<210> 83
<211>
      9
<212> PRT
<213>
     homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (2)..(9)
<223>
      Binding site
<400>
      83
Asn Leu Asn Glu Lys Ile Lys Lys Asp
<210>
      84
<211>
      10
<212>
      PRT
<213>
      homo sapien
<220>
<221>
      MISC_FEATURE
<222>
      (2)..(9)
<223> Binding site
<400> 84
Ile Lys Lys Asp Glu Leu Lys Lys Ser Leu
<210>
      85
<211>
      13
<212> PRT
<213> homo sapien
```

Page 31

```
<220>
      MISC_FEATURE
<221>
       (3)..(10)
<222>
<223>
       Binding site
<400>
       85
Leu Val Ser Arg Ser Leu Lys Met Arg Gly Gln Ala Phe
                 5
                                      10
<210>
       86
<211>
       12
<212>
       PRT
<213>
      homo sapien
<220>
<221>
       MISC FEATURE
       (4)..(11)
<222>
       Binding site
<223>
<400>
      86
Gln Gly Phe Pro Phe Tyr Asp Lys Pro Met Arg Ile
<210>
       87
<211>
       9
<212>
       PRT
<213>
       homo sapien
<220>
<221>
       MISC_FEATURE
<222>
       (1)..(8)
<223>
       Binding site
<400> 87
Ile Ile Ala Lys Met Lys Gly Thr Phe
                 5
<210>
       88
<211>
       13
```

Page 32

90

```
<212>
       PRT
<213>
      homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (3)..(10)
<223>
      Binding site
<400>
      88
Glu Arg Asp Arg Lys Arg Glu Lys Arg Lys Pro Lys Ser
<210>
      89
<211>
       9
<212>
      PRT
<213>
      homo sapien
<220>
      MISC_FEATURE
<221>
<222>
      (1)..(8)
<223>
      Binding site
<400>
      89
Gln Glu Thr Pro Ala Thr Lys Lys Ala
1
                5
<210>
      90
<211>
      8
<212>
      PRT
<213>
      homo sapien
<400>
       90
Ala Leu Gln Gly Phe Lys Ile Thr
                5
<210>
      91
<211>
       9
      PRT
<212>
<213> homo sapien
```

Page 33

9/

```
<220>
      MISC FEATURE
<221>
<222>
      (2)..(9)
<223>
      Binding site
<400>
       91
Ala Met Lys Ile Ser Phe Ala Lys Lys
<210>
      92
<211>
      18
<212>
      PRT
<213>
      homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (10)..(17)
<223>
      Binding site
<400>
      92
Ser Val Arg Lys Thr His Cys Ser Gly Arg Lys His Lys Glu Asn Val
                                                         15
Lys Asp
<210>
      93
<211>
       8
<212>
      PRT
<213>
      homo sapien
<400>
       93
Lys Asp Tyr Tyr Gln Lys Trp Met
<210>
       94
<211>
       9
<212>
      PRT
      homo sapien
<213>
```

Page 34

92

```
<220>
       MISC_FEATURE
<221>
<222>
      (1)..(8)
      Binding site
<223>
<400> 94
Ala Phe Gln Gln Gly Lys Ile Pro Pro
<210>
       95
<211>
<212>
       PRT
<213>
       homo sapien
<220>
      MISC_FEATURE
<221>
      (1)..(8)
<222>
<223>
     Binding site
<400>
       95
Lys Ile Pro Pro Thr Pro Phe Ser
                5
<210>
      96
<211>
       8
<212>
      \mathtt{PRT}
<213>
      homo sapien
<220>
<221>
      MISC FEATURE
<222>
      (1)..(8)
<223>
      Binding site
<400> 96
Pro Pro Pro Ser Leu Pro Gly
<210> 97
```

Page 35

```
<211>
       8
<212>
      PRT
<213>
      homo sapien
<220>
     MISC FEATURE
<221>
<222>
      (1)..(8)
<223> Binding site
<400> 97
Ser Leu Pro Gly Pro Pro Arg Pro
                5
<210>
      98
<211>
      10
<212>
      PRT
<213>
      homo sapien
<220>
<221> MISC FEATURE
<222>
      (2)..(9)
<223> Binding site
<400> 98
Gly Pro Pro Arg Pro Gly Met Met Pro Ala
                                    10
<210> 99
<211>
<212>
      PRT
<213>
      homo sapien
<220>
<221>
      MISC_FEATURE
<222>
      (1)..(8)
<223>
      Binding site
<400> 99
Pro Pro Pro Gly Met Met Pro
                5
```

Page 36

*

```
<210> 100
<211> 9
<212> PRT
<213> homo sapien
<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Binding site
<400> 100
Gly Pro Ala Pro Gly Met Arg Pro Pro
               5
<210> 101
<211> 8
<212> PRT
<213> homo sapien
<220>
<221>
     MISC FEATURE
<222> (1)..(8)
<223> Binding site
<400> 101
Pro Pro Met Met Arg Pro Pro Ala
<210> 102
<211>
     8
<212>
      PRT
<213>
      homo sapien
<220>
<221> MISC_FEATURE
<222> (1)..(8)
<223> Binding site
<400> 102
```

```
Pro Gly Met Thr Arg Pro Asp Arg
<210> 103
<211>
      8
<212>
      PRT
<213>
      homo sapien
<400>
     103
Ile Gly Thr Phe Lys Ala Phe Asp
                5
<210> 104
<211>
      8
<212>
      PRT
<213>
     homo sapien
<400> 104
Asp Cys Asp Glu Phe Arg Lys Ile
<210> 105
<211>
<212>
      PRT
<213> homo sapien
<400> 105
Pro Lys Asn Ala Lys Gln Pro Glu
<210>
      106
<211>
      8
<212>
      PRT
<213>
      homo sapien
<400>
      106
Met Pro Pro Pro Gly Met Arg Pro
```

Page 38

```
<210>
     107
<211>
      8
<212>
      PRT
<213>
      homo sapien
<400>
      107
Gln Gln Val Met Thr Pro Gln Gly
                5
<210>
      108
<211>
<212>
      PRT
      homo sapien
<213>
<400> 108
Gln Gly Arg Gly Thr Val Ala Ala
<210> 109
<211>
      8
<212>
      PRT
<213> homo sapien
<400> 109
Ala Pro Thr Gln Tyr Pro Pro Gly
<210>
      110
<211>
       8
<212>
      PRT
<213> homo sapien
<400>
      110
Gly Thr Pro Pro Pro Pro Val Gly
                5
1
<210> 111
<211>
<212>
     PRT
```

```
<213> homo sapien
<400>
     111
Ile Met Ala Pro Pro Pro Gly Met
<210>
      112
<211> 8
<212> PRT
<213> homo sapien
<400> 112
Ile Gly Met Pro Pro Pro Gly Met
               5
<210> 113
<211> 8
<212> PRT
<213> homo sapien
<400> 113
Gly Met Pro Pro Pro Gly Met Arg
<210> 114
<211> 8
<212> PRT
<213> homo sapien
<400> 114
Pro Pro Gly Met Arg Pro Pro Pro
<210>
      115
<211>
<212>
      PRT
<213> homo sapien
```

<400> 115

Page 40

8

```
OMRF 114 CIP2.ST25
Met Arg Pro Pro Pro Gly Ile
               5
<210> 116
<211> 8
<212>
     PRT
<213> homo sapien
<400> 116
Pro Ala Pro Gly Met Arg Pro Pro
<210> 117
<211>
     8
<212>
     PRT
<213> homo sapien
<400>
     117
Pro Pro Pro Gly Met Ile Pro Pro
               5
<210>
     118
<211> 8
<212>
     PRT
<213>
     homo sapien
<400> 118
Met Pro Pro Pro Gly Met Arg Pro
               5
<210> 119
<211>
     6
<212> PRT
<213> homo sapien
<220>
<221>
      MISC FEATURE
<222>
     (5)..(5)
<223> Xaa at position 5 is an undetermined amino acid
```

Page 41

```
<400> 119
Pro Pro Pro Gly Xaa Arg
<210> 120
<211> 5
<212> PRT
<213> homo sapien
<400>
     120
Pro Pro Pro Pro
               5
<210> 121
<211> 8
<212> PRT
<213> homo sapien
<400> 121
Pro Gly Ile Arg Gly Pro Pro Pro
               5
<210> 122
<211>
      8
<212>
      PRT
<213>
      Homo Sapien
<400>
      122
Pro Pro Pro Gly Ile Arg Pro Pro
               5
<210>
      123
<211> 8
<212>
      PRT
<213> Homo sapiens
<400>
     123
Thr Phe Lys Ala Phe Asp Lys His
1
               5
```

```
<210>
      124
<211>
      8
      PRT
<212>
<213>
     Homo sapiens
<400>
     124
Cys Asp Glu Phe Arg Lys Ile Lys
<210>
      125
<211>
      8
<212>
      PRT
<213>
     Homo sapiens
<400>
     125
Asp Glu Phe Arg Lys Ile Lys Pro
                5
<210>
      126
<211>
     8
<212>
      PRT
<213> Homo sapiens
<400>
      126
Glu Phe Arg Lys Ile Lys Pro Lys
                5
<210>
      127
<211> 8
<212>
      PRT
<213>
      Homo sapiens
<400> 127
Phe Arg Lys Ile Lys Pro Lys Asn
<210> 128
<211> 8
```

Page 43

```
<212>
       PRT
<213>
      Homo sapiens
<400>
      128
Arg Lys Ile Lys Pro Lys Asn Ala
<210> 129
<211>
      8
<212> PRT
<213> Homo sapiens
<400> 129
Lys Ile Lys Pro Lys Asn Ala Lys
<210>
      130
<211>
       8
<212>
      PRT
<213>
      Homo sapiens
<400>
      130
Ile Lys Pro Lys Asn Ala Lys Gln
<210>
       131
<211>
       8
<212>
      PRT
<213>
      Homo sapiens
<400>
      131
Lys Pro Lys Asn Ala Lys Gln Pro
<210>
      132
<211>
       8
<212>
      PRT
<213>
      Homo sapiens
<400>
      132
```

Page 44

```
Gln Val Met Thr Pro Gln Gly Arg
                5
<210> 133
<211>
<212>
      PRT
<213> Homo sapiens
<400> 133
Val Met Thr Pro Gln Gly Arg Gly
<210> 134
<211> 8
<212> PRT
<213> Homo sapiens
<400> 134
Met Thr Pro Gln Gly Arg Gly Thr
                5
<210> 135
<211> 8
<212> PRT
<213> Homo sapiens
<400> 135
Thr Pro Gln Gly Arg Gly Thr Val
<210> 136
<211>
      8
<212>
      PRT
<213>
      Homo sapiens
<400>
     136
Pro Gln Gly Arg Gly Thr Val Ala
```

```
<210> 137
<211> 8
<212>
      PRT
<213>
     Homo sapiens
<400>
     137
Pro Thr Gln Tyr Pro Pro Gly Arg
               5
<210> 138
<211> 8
<212>
     PRT
<213>
     Homo sapiens
<400> 138
Thr Gln Tyr Pro Pro Gly Arg Gly
<210> 139
<211>
     8
<212>
     PRT
<213> Homo sapiens
<400> 139
Tyr Pro Pro Gly Arg Gly Thr Pro
<210>
     140
<211>
     8
<212>
     PRT
<213>
     Homo sapiens
<400>
     140
Gln Tyr Pro Pro Gly Arg Gly Thr
               5
<210> 141
<211> 8
<212> PRT
```

```
<213> Homo sapiens
<400> 141
Pro Pro Gly Arg Gly Thr Pro Pro
<210> 142
<211> 8
<212> PRT
<213> Homo sapiens
<400> 142
Pro Gly Arg Gly Thr Pro Pro Pro
               5
<210> 143
<211> 8
<212> PRT
<213> Homo sapiens
<400> 143
Gly Arg Gly Thr Pro Pro Pro
               5
<210> 144
<211> 8
<212> PRT
<213> Homo sapiens
<400> 144
Arg Gly Thr Pro Pro Pro Pro Val
<210> 145
<211> 8
<212> PRT
```

Page 47

<213> Homo sapiens

<400> 145

185

Met Ala	a Pro Pro	Pro Gly	Met	Arg
<210>	146			
<211>	8			

<400> 146

<400>

<400>

<212> PRT

<213> Homo sapiens

Ala Pro Pro Pro Gly Met Arg Pro 5

```
<210> 147
<211> 8
<212> PRT
<213> Homo sapiens
```

Pro Pro Pro Gly Met Arg Pro Pro 1 5

```
<210> 148
<211> 8
<212> PRT
<213> Homo sapiens
```

148

147

Dro Dro Clar Mot Are Due Due

Pro Pro Gly Met Arg Pro Pro Met 1 5

```
<210> 149
<211> 8
<212> PRT
<213> Homo sapiens
<400> 149
```

Pro Pro Pro Gly Met Arg Pro Pro 1 5

Page 48

106

```
<210> 150
<211>
<212>
     PRT
<213> Homo sapiens
<400> 150
Arg Pro Pro Pro Gly Ile Arg
<210> 151
<211> 8
<212> PRT
<213> Homo sapiens
<400>
     151
Pro Pro Pro Gly Ile Arg Gly
               5
<210> 152
<211> 8
<212> PRT
<213> Homo sapiens
<400> 152
Pro Pro Pro Gly Ile Arg Gly Pro
<210> 153
<211>
     8
<212>
     PRT
<213>
      Homo sapiens
<400>
     153
Pro Pro Gly Ile Arg Gly Pro Pro
<210> 154
<211> 8
<212> PRT
<213> Homo sapiens
```

Page 49

187

<400> 154 Arg Gly Pro Pro Pro Pro Gly Met <210> 155 <211> 8 <212> PRT <213> Homo sapiens <400> 155 Gly Pro Pro Pro Gly Met Arg <210> 156 <211> 8 <212> PRT<213> Homo sapiens <400> 156 Pro Pro Pro Gly Met Arg Pro <210> 157 <211> 8 <212> PRT

<213> Homo sapiens

<400> 157

Pro Pro Pro Gly Met Arg Pro Pro 1 5

<210> 158

<211> 8

<212> PRT

<213> Homo sapiens

<400> 158

Pro Pro Gly Met Arg Pro Pro Arg

Page 50

```
5
1
<210>
      159
<211>
      7
<212>
      PRT
      Homo sapiens
<213>
<400>
      159
Pro Pro Pro Gly Met Arg Pro .
1
                5
<210>
      160
<211>
<212>
      PRT
<213>
       Homo sapiens
<400>
       160
Pro Pro Pro Gly Met Arg
                5
<210>
      161
<211>
       5
<212>
      PRT
<213>
      Homo sapiens
<400>
      161
Pro Pro Pro Gly Met
```

Page 51